Abstract Of The Disclosure

[174] A network layer verification mechanism (NLVM) is inserted between DUTs or between a DUT and the test bench components in order to simulate conditions that can occur in a packetized network connection, such as dropped packets, duplicate packets, corrupted packets out-of-order packets and delayed packets. The NLVM has internal storage and an application programmer interface (API) which can be driven by the test bench and comprises a plurality of methods that allow packets received by the NLVM to be selectively forwarded through the object, temporarily stored in the object or the packet data to be corrupted. The NLVM is implemented as an object with an interface that is independent of the simulation configuration so that verification test benches and tests can be written with no reliance on bus functional models and environment-specific details.